

**Timothy M. Barzyk, Research Physical Scientist, in EPA's National Exposure Research Laboratory**

Computational Exposure Division

[Mailing Address](#)

[barzyk.timothy@epa.gov](mailto:barzyk.timothy@epa.gov)

**Area of Expertise:** Timothy's main research areas are cumulative risk, environmental justice and sustainability. They each have many components, and Timothy is generally interested in them all. In terms of application to his work, he focuses primarily on how people are exposed to multiple chemical and non-chemical stressors, and develop methods to help identify these stressors and explore options for reducing exposure to them.

**Select Publications:**

Barzyk TM, White BM, Ciesielski A, Perlmutter L, Millard M, Harris F, et al. (2011) Application of Tools and Databases to Community-Level Assessments of Exposure, Health and the Environment with Case Study Examples. EPA Report EPA/600/R-11/120

Barzyk TM, White BM, Millard M, Martin M, Perlmutter LD, Harris F, Nguyen P, Walts A, Geller A (2011). Linking Socio-Economic Status (SES), Adverse Health Outcome, and Environmental Pollution Information to Develop a Set of Environmental Justice Indicators with Three Case Study Applications. *Environmental Justice* 4(3): 171-177.

Barzyk TM, Ciesielski A, Shores RC, Thoma ED, Seila RL, Isakov V, Baldauf RW (2011). Associations between Volatile Organic Compounds and a Tracer Gas Surrogate in a Near-Road Environment. *Journal of the Air and Waste Management Association*, In press.

Hammond D, Conlon K, Barzyk T, Chahine T, Zartarian V, Schultz B (2011). Assessment and Application of National Environmental Databases and Mapping Tools at the Local Level to Two Community Case Studies. *Risk Analysis*, 31 (3), 475-487.

Zartarian V, Schultz B, Barzyk T, Smuts M, Hammond D, Medina-Vera M, Geller AM (2011 – In Press). The EPA's Community-Focused Exposure and Risk Screening Tool (C-FERST) and Its Potential Use for Environmental Justice Efforts. *American Journal of Public Health*, 101 No. S1.

Barzyk TM (2010). Tools to Assess Community-Based Cumulative Risk and Exposures. 2010 McGraw-Hill Yearbook of Science and Technology.

View more research publications by [Timothy Barzyk](#).

**Education:**

- Ph.D., Geophysical Sciences, University of Chicago, 2006
- M.S., Environmental Science & Public Policy, Irving B. Harris Graduate School of Public Policy Studies, University of Chicago, 2002
- B.S., Geology with Mathematics minor, Indiana State University, 1998
- Chair of Environmental Justice Sub-Panel, EPA Cumulative Risk Assessment Technical Panel for the Risk Assessment Forum, 2010-present
- Principle Investigator for Annual Performance Measure: Assessment of the application of tools and methods to case study communities
- Co-Chair, Aligning EPA Research & Needs to Advance the Science and Practice of Cumulative Risk Assessment, A Scientist-to-Scientist Workshop, Session on Community-Based Cumulative Risk Assessment, 2009
- Facilitative Leadership Management Training, 2010

**Professional Experience:**

- Research Physical Scientist, USEPA, ORD, NERL, Research Triangle Park, NC 2007-present
- Post-Doctoral Physical Scientist, U.S. EPA, ORD, NERL, Research Triangle Park, NC 2006-2007
- Intern, Carlson Environmental, Chicago, IL 2000-2001
- Field Technician, Handex Consulting & Remediation, LaPorte, IN 2000